BILL NO. S-81-11 - 43

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31 32 SPECIAL ORDINANCE NO. S-268-8/

AN ORDINANCE approving Change Order Nos. 1, 2, & 3, for 313-80, Limberlost-Mardego Hills, Federal Grant No. C-180599-06 in connection with the Board of Public Works

BE IT ORDAINED BY THE COMMON COUNCIL OF THE CITY OF FORT WAYNE, INDIANA:

SECTION 1: That Change Order No. 1 for 313-80, Limber-lost-Mardego Hills, Federal Grant No. C-180599-06 to Earth Construction & Engineering, Inc. in connection with the Board of Public Works, for:

change due to extremely tight working conditions in the rear easements on Lateral #3, a move was made to the street area on Jamiaca Steet.

SECTION 2: That Change Order No. 2 for 313-80, Limber-lost-Mardego Hills, Federal Grant No. C-180599-06 to Earth Construction & Engineering, Inc. in connection with the Board of Public Works, for:

to meet county specifications for street restoration these adjustment of quantities had to be made.

SECTION 3: That Change Order No. 3 for 313-80, Limber-lost-Mardego Hills, Federal Grant No. C-180599-06 to Earth Construction & Engineering, Inc. in connection with the Board of Public Works, for:

that there was an exchange in the type of backfill and also use of base stablization in lieu of dewatering. The balance of these quantities were as a result of lowering Lateral No. 1,

in the amount of \$4,695.00 for Change Order #1; \$12,637.50 for Change Order #2; \$32,135.74 for Change Order #3, as set out in the specification, which are on file in the Office of the Board of Public Works and are by reference incorporated herein and made

a part hereof, be and the same is in all things ratified, confirmed and approved.

SECTION 4: That this Ordinance shall be effective from and after its passage and approval by the Mayor.

COUNCILMAN Servers

APPROVED AS TO FORM AND LEGALITY NOVEMBER 20, 1981.

BRUCE O. BOXBERGER, CITY ATTORNEY

seconded by by title and refer Plan Commission for due legal notice, a Indiana, on  DATE:  Read the this	red to the correction of the Council	, and of committee attion) and cil Chamber 19, the	ers, City-Cour	read the same to be sty Building to be sty Building o'clock	second time ind the City weld after ag, Fort Wayne day of M.,E.S.T.	
	AYES	NAYS	ABSTAINED	ABSENT	TO-WIT:	
TOTAL VOTES	_8_					
BURNS						
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SCHMIDT, D.						
SCHMIDT, V.						
SCHOMBURG						
STIER						
TALARICO						
DATE: / 2	-8-81	_	CHARLES W. W	Marle ESTERMAN -	CITY CLERK	
Passed and ad	opted by th	e Common	Council of th	e City of	Fort Wayne,	
Indiana, as (ZONING	MAP) (GE	NERAL)	(ANNEXATION)	(SPECIAL	2 0	
(APPROPRIATION) ORD	INANCE (R	ESOLUTION	) No.	- 268	22/	
on the	day of	_de	comber	, 19 <i>P</i>	<u>_</u> .	
CHARLES W. WESTERMAN	ATTEST: (SEXL)  CHARLES W. WESTERMAN - CITY CLERK PRESIDING OFFICER					
Presented by			-	-	•	
the 9th	_day of _L	Decen	bec, 19 8/	_, at the	hour of	
//:30 o'clock	с <u>А</u> м	.,E.S.T.	CHARLES W. W	Ulej E	CITY CLERK	
Approved and	signed by me	e this	940		day of Dec.	
19 8 , at the hou	c of 4		'clock RM.	E.S.T.		
			WINFIELD C. I	MOSES, JR.		

DATE

#### CHANGE ORDER

	ge Order No				Resolution N	o. <u>313-80</u>
	of Project	C-180599-06 : Limberlost-Mardego Hills			Board Order	
Name	or rrojec <u>r</u>	. Limberrost-Mardego Hiris			Date: 10/9	181
To: E	ARTH CONSTR	RUCTION & ENGINEERING, INC.				
		(Contractor)				
Gent	Lemen:					
You a	are hereby	requested to comply with the	followin	changes fi	om the contra	or plane and
spec	ifications:					- Passas unu
Item	T	Description of Change			61	
No.	Ouantity	Description Description		Jnit Price	Decrease	Increase
				July 111cc	Decrease	Increase
		SEE ATTACHED SHEET				
	L	L				
			m	1 D	/ F 0 c 0 0 0	
			1016	l Decrease	45,960.00	
			Tota	1 Increase		41,265.00
		Net (Decrease)(knammamm)	Cont	ract Price	4,695.00	
The av	m of 0 .5	605.00				
and th	e final cor	695.00 is hereby (addentract price shall be adjuste	axxa)(dec	ucted from)	the total con	tract price
			u as 1011	.ows.		
		Contract Price Contract Price Adjusted by Pr	ordona Ch	anaa O. 1	s_526,350.8	30
	New Contr	act Price including this Cha	evious cn	ange Order	526,350.8	30
			go oracz		\$ 521,655.8	30
The ti	me provided	for completion in the contr	act for t	hio municat	4- (	
Cecre	aseal DV	-U- calendar dave due	to this C	hango Order	TL - 1 - 4 - 6 -	
of all	work shall	l beN/A	Furthern	ore, this d	ocument shall	become an
amenda	ent to the	be N/A contract and all provisions	of the co	ntract shal	l apply hereto	
Secomm	ended by:	Call. El				
ite e o iiii.	.c.ided by:_	Column Enlong	Chi	er Engineer	Date_/v/	19/87
Accept	ed by:	They A. Bolly	Const.	Contractor	Date /O -	9-81
	(	614. A ROU	7		1	
Approv	ed by:	125kg 12. 2270llg	Ci	ty Engineer	Date Nov.	9,1981
Approv	ed by: 1	e w stil		Owner		
	PA	A Adeca Mat				
		2- 22 .0 (				
	_6	selen & Collins				
ttoot	ed by:	21118				
rrest	ed by: 70	- Ferri		Clerk	Date_//~/.	7-81

#### ATTACHMENT TO CHANGE ORDER

Item		Description of Change		Change in Con	tract Price
No.	Quantity	Description	Unit Price	Decrease	Increase
1	1250± LF	8" Sewer Pipe (Lateral #3)	16.80	21,000.00	
6.	4± EA	Std. Manhole Type I-A	1,190.00	4,760.00	
10	1550± LF	6" Building Sewer (non-fundable)	15.50		24,025.00
20	2600± SY	Double Chip & Seal	1.80		4,680.00
27	800± LF	8"-15" Culvert Replacement	15.70		12,560.00
29	2020± LF	Gas Line Replacement & Relocation	10.00	20,200.00	
					***************************************
		т	otal Decrease	45,960.00	
			otal Increase	.5,500100	41,265.00
	Net (Decrea		ontract Price	4,695.00	

			Resolut	ion No	313-80
			Board C	rder No	15-80
	REQUEST AND JUS	TIFICATION FOR (	CHANGE		
	Magazar 1215 000	III IONIION TOR	SILANGL	,	
Necessity for a	change:				
	SEE AT	FACHED SHEET			
		****			
	*				
Will proposed ch	ange alter size of t	he project?	Yes	No_X	
If yes, explain					
•					
Affect on operat	ion and maintenance	nost of this are	inet.		
milect on operat	.ion and maintenance	cost of this pic	Ject:		
		7.			
		N/A			
-					
		,			

Gregory Merill
Project Engineer

Change Order No.\_

### JUSTIFICATION FOR CHANGE ORDER NO. 1 Resolution 313-80 St. Joe Study Area - EPA C-180599-06

B.O. #15-80

#### EARTH CONSTRUCTION & ENGINEERING, INC., Contractor

Items #1, 6, 10, 20, 27 and 29

Originally the proposed sewer (Lateral #1) from Str. #3 through Str. #8 was to be installed in the existing easement behind the lots. Due to the confines of the small easement area which had existing gardens, trees, etc., and taking into account the depth of the sewer (15-20±VF), which might have required extensive sheeting to hold the trench walls, the Engineering Department decided to move the sewer from the easement on to Jamiaca Street. In addition to the time savings involved, the above decision also helped eliminate (a) Lateral #3 completely (b) deducted almost all of the gas line relocation which was involved in the easements.

The following is a brief summary on the stimated cost savings that the City of Fort Wayne has received:

#### COST ADDITIONS BY MOVING LATERAL #1 ON JAMAICA STREET

Additional Special Backfill	635± CY @ \$	3.40 =	\$ 2,159.00
Additional #53 or #73 Backfill	285± CY @ \$	10.15 =	\$ 2,892.75
Double Chip & Seal	2600± SY @ \$		4,680.00
8"-15" Culverts	200± LF @ \$	15.70 =	\$ 3,140.00
6" Building Sewer Pipe	900± LF @ \$	15.50 =	\$ 13,950.00

TOTAL ADDITIONS \$ 26,821.75

#### COST SAVINGS BY MOVING LATERAL #1 ON JAMAICA STREET

8" Sewer Pipe (Lateral #3)	1250± LF @ \$ 16	.80 =	\$ 21,000.00
Std. MH Type I-A	4± EA @ \$1190	.00 =	\$ 4,760.00
Gas line replacement	2020± LF @ \$ 10	.00 =	\$ 20,200.00
Possible Sheeting (est. cost)	18000± SF @ \$ 3	.50 =	\$ 63,000.00

TOTAL SAVINGS

\$108,960.00

As shown above, the City of Fort Wayne definitely received a net savinsgs of  $\$19,138\pm$ , by moving Lateral #1 on to Jamaica Street, and if sheeting would have been used, of which there was a great possibility, then the net savings would be  $\$82,140\pm$ .

Items #10 and #27

These items reflect the total additional quantity needed for the whole project, which is now completed, except for final restoration. Most of the culverts were encountered during construction time, apparently buried which couldn't be seen by the naked eye during design stages. The 6" building sewer pipes were not underestimated as such, but the additional quantity emerged from the fact that longer extensions were needed across the street from Lateral #1 and #2; since Lateral #1 was moved on to Jamaica. Therefore, houses on the east side of Jamaica and Nottawa were tapped in from the above two laterals in lieu of tapping them from the easement as originally planned. This additional quantity amounted

to 900± LF due to Lateral #1 being relocated, the remaining additional quantity has emerged from the rest of the project, where the Engineering Department authorized the contractor to extend 6" taps to about five vacant lots and also from the fact that minor field alignments were done in the field, which increased the length of some of the building sewers.

#### CHANGE ORDER

Proje	ct No.	- 2 C-180599-06 : Limberlost-Mardego Hills		Resolution No Board Order No Date: /0/6/	o <u>.</u> 15-80
To: E	ARTH CONSTR	UCTION & ENGINEERING, INC. (Contractor)			
Con+1	emen:	(Contractor)			
You a		requested to comply with the following	ng changes fr	om the contract	t plans and
Item		Description of Change		Change in Cor	ntract Price
No.	Ouantity	Description	Unit Price	Decrease	Increase
19	8,000± SY	2" Asphaltic Surface	3.50	28,000.00	-
32	11,700± SY	1½" Asphaltic Surface	2.80		32,760.00
33	685± SY	4" Asphalt Base for Trench Cuts Only	11.50		7,877.50
		Tot	al Decrease	28,000.00	
		Tot	al Increase		40,637.50
		Net (Desmesse) (Increase) Con	tract Price		12,637.50
The su and th	e final cor Original Current (	is hereby (added to) (deatract price shall be adjusted as fol Contract Price Contract Price Adjusted by Previous C cact Price including this Change Orde	lows: hange Order#:	\$ 526,350. 521,655.	80
(desse of all amenda	me provided ased) by _ work shall	d for completion in the contract for  -0- calendar days due to this lbe N/A . Further contract and all provisions of the c	this project Change Order more, this d	<ul> <li>The date for ocument shall h l apply hereto.</li> </ul>	(increased)x completion pecome an
Recomm	ended by:_	Cheene Entry Ch. Brown Earl Court.	nief Engineer	Date 10/1	19/81
Accept	ed by:				
Approv	ed by:	hilp & Molle	City Engineer	Date Nov. 9	1981
Approv	ed by:	Te w Str	Owner	Date _//- /8	2-81
Attact		Le Monders North			7- GI

Change Order No.	2
Resolution No	313-80
Boord Orden No	15-80

#### REQUEST AND JUSTIFICATION FOR CHANGE

	SE	E ATTACHED JU	JSTIFICATIO	N	
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		**************************************			
			***************************************		·············
					• •
	ange alter s	ize of the p	roject?	Yes	No_X
	ange alter s	ize of the p	roject?	Yes	No_X
f yes, explain	ange alter s		roject?	Yes	No_X
f yes, explain			,		No_X
f yes, explain			,		No_X
f yes, explain			of this p		No_X
Will proposed ch		tenance cost	of this p		No_X

Gregory J. Meirel Project Engineer

# JUSTIFICATION FOR CHANGE ORDER NO. 2 Resolution 313-80 St. Joe Study Area - EPA C-180599-06 B.O. #15-80

#### EARTH CONSTRUCTION & ENGINEERING, INC., Contractor

Items #19, 32 and 33

Wherever trench cuts are made across an improved asphalt road, the county specifications require a minimum of 4" asphalt with 6-8" of stone subbase, and then a final 1"-1½" surface layer. In order to hold the cost comparatively down, a new item for 1½" asphalt surface has been added. After contacting local suppliers, the new unit price of \$2.80/SY as submitted by the contractor, in our opinion, is justified. This Change Order includes revised estimate for the 1½" asphalt surface since some approaches and side streets were neglected in the original bid estimate.

The 4" asphalt unit cost is the same unit cost that the contractor bid for 4" asphalt driveways. However, the Engineering Department decided to keep these two items separate. The 2" asphaltic surface has been deducted from the original bid since the  $1\frac{1}{2}$ " surface meets the minimum specifications.

#### CHANGE ORDER

Proje	ge Order No	. 3 C-180599-06 : Limberlost, Mardego Hills		Resolution No Board Order N Date: /0/9/	0. 13-00
To:		STRUCTION & ENGINEERING, INC.		Date: /0/9/	81
		(Contractor)			
You a	lemen: are hereby : ifications:	requested to comply with the fo	llowing changes fr	om the contrac	t plans and
Item	T	Description of Change	T T	Change in Co	ntract Price
No.	Ouantity	Description	Unit Price	Decrease	Increase
		SEE ATTACHED SHEET			
					-
			Total Decrease	15,835.00	
			Total Increase		47,960.74
		Net (Decrease) (Increase)	Contract Price		32,135.74
		is hereby (added ntract price shall be adjusted		the total con	tract price
	Current (	Contract Price Contract Price Adjusted by Prev ract Price including this Chang		2 \$ 526,350.80 \$ 53\(\frac{1}{2}\),293.30 \$ 566,429.04	
(decks	eaged)xby _ l work shal	d for completion in the contract—0— calendar days due to 1 be N/A . F contract and all provisions of	this Change Order Furthermore, this d	. The date for	r completion become an
Recom	mended by:	Muane Enlowing	Chief Engineer	Date /c/	19/81
Accep	ted by:		Contractor		
Appro	ved by:	Thilp M. Beller	City Engineer	Date NOV.	9,1981
Appro	ved by:	re-v-sax	Owner	Date	8-81
	P	Render Date		-	
		Le Le		- D-1-18	-81

### ATTACHMENT TO CHANGE ORDER

Item		Description of Change		Change in Con	tract Price
No.	Quantity	Description Of Change	Unit Price	Decrease	Increase
11	4200± CY	Special Backfill	3.40		14,280.00
12	1500± CY	#53 or #73 Special Backfill	10.15	15,225.00	
23	2050± LF	4"-12" Tile Replacement	9.70		19,885.00
28	1200± LF	Dewatering	.50	600.00	
31	875± CY	Base Stabilization :	4.00		3,500.00
34	1900± LF	Lowering 12" Sewer (Lateral #1)			. •
		between Str. #3 - Str. #8	Lump Sum		9,446.74
35	1± EA	Std. Cleanout	210.00		210.00
36	30± SY	10" Deep Strength Asphalt	21.30		639.00
	-				
		·			
	1		Total Decrease	15,825.00	
			Total Increase		47,960.74
	Net (Decre	(Increase)	Contract Price		32,135.74

Change Order No	3
Resolution No	313-80
Board Order No	15-80

#### REQUEST AND JUSTIFICATION FOR CHANGE

	SEE ATTA	CHED JUS	TIFICAT	ON			
• 1.	*	;		· · · · · · · · · · · · · · · · · · ·		. 1	
				010			
		*	•				
	alter size of	the pro	oject?	Yes	N	оХ	
If yes, explain	alter size of				No.	оХ	
If yes, explain					N	oX	
If yes, explain					No	ox	
Will proposed change If yes, explain  Affect on operation		e cost (			N-	oX	-
If yes, explain		e cost (			N	oX	

Grany Marill Project Engineer

# JUSTIFICATION FOR CHANGE ORDER NO. 3 Resolution 313-80 St. Joe Study Area - EPA C-180599-06 R.O. #15-80

#### EARTH CONSTRUCTION & ENGINEERING, INC., Contractor

Items #11 and #12
Special Backfill and #53 or #73 special backfill are two different types of backfill material. Special Backfill is sand or bankrum gravel; #53 or #73 is gravel or stone backfill. Our specifications require special backfill when sewers are installed under improved streets and running parallel with the streets. The #53 or #73 is to be used for backfill when sewers cross 45°-90° across the streets. However, in this project #53 or #73 special backfill was incorrectly specified on the plans. Therefore, this Change Order is to correct this situation, and hence, special backfill quantity is being increased and #53 or #73 special backfill is being decreased. However, the special backfill items have been increased more in comparison to #53 or #73 special backfill. This was due to the fact that Lateral #1 was moved from Str. #3 to Str. #8 from the easement to Jamiaca Street because of conflict with the gas line and its excessive depth (reference Change Order #1), and, therefore, needed approximately 660 CY of backfill.

The remaining special backfill was used in excess all along West Rosewood Circle where fluid ground conditions existed. The remainder of #53 or #73 special backfill shall only be used as street subbase for restoration. The revised quantities in this Change Order reflect total up-to-date quantities used, plus some additional quantities to be used during final restoration.

Item #23

As construction progressed, the contractor came in direct conflict with existing tiles much more than was anticipated. This is due to the fact that property owners several years ago, filled up their drainage swales and installed drainage tiles and connected to their culverts. This is quite common in subdivisions of Allen County and is referred to as "blind ditching." Consequently, this kind of arrangement cannot be seen by the naked eye and hence, never noted on design plans. Major percentage of these tiles were on Gongwer Drive and the Engineering Department did a brief cost summary between replacing all the tiles in conflict or move the proposed sewer under the existing pavement. The latter proposal would have required tremendous amount of special backfill plus base asphalt. Hence, decision to move the sewer toward the street was not practical and cost-effective.

Items #28 and #31

On West Rosewood Circle between Str. #15 and Str. #18 on Lateral #1, the ground conditions changed and the contractor was continuously battling with fluid ground It was also concluded that dewatering might not have worked since there was an intermediate layer of clay which would have prevented a complex wellpoint system to adequately dewater the ground water from up above. Therefore, the contractor was overcutting the trench to support the walls and using excessive amounts of base stabilization for pipe laying.

Item #34

Before construction started, exploratory excavation was done for existing old county drainage tiles. Since no records existed of its depth prior to construc-

tion, excation of the 30" RCP around Str. #7 showed that the existing tile was in direct conflict. Therefore, the samitary sewer (Lateral #1) from Str. #3 to Str. #8 had to be deepened to avoid conflict as shown on the attached cost breakdown.

The Engineering Department estimated the overcut at an additional cost of \$4.75/LF. The cost submitted by the contractor is justified in our opinion which generates a unit cost of \$4.97/LF.

#### Item #35

A Cleanout was installed on this project of which there was no bid item to reimburse the contractor. Therefore, this is a new unit item and the unit cost of \$210.00 is the same that Earth Construction & Engineering, Inc. bid on Resolution 314-80 Phase I, which in the Engineering Department's opinion is fully justified.

#### Item #36

When the sewer crossed Dupont Road which is a major county road, the trench cut was restored with 10" deep strength asphalt of which there was no unit bid item. Therefore, this is also a new unit item and the unit cost of \$21.30/SY is the same that Earth Construction & Engineering, Inc., bid on Resolution 315-80, which in the Engineering Department's opinion is fully justified.

TITLE OF ORDINANCE Change Order 1,2,3, Res. 313-80, Limbertost-Hartego HIII3, C-166333-60
DEPARTMENT REQUESTING ORDINANCE BOARD OF PUBLIC WORKS 4-81-11-43
SYNOPSIS OF ORDINANCE Change Orders 1,2, & 3, Resolution 313-80, Limberlost - Mardego
Hills, Earth Construction & Engineering, Inc Contractor. Change Order #1 - Due to
extremely tight working conditions in the rear easements on Lateral #3, a move
was made to the street area on Jamiaca Street. Change Order #2 - This to meet county
specifications for street restoration these adjustment of quantities had to be made.
Change Order #3 - There was an exchange in the type of backfill and also use of base
stablization in lieu of dewatering. The balance of these quantities were as a result
of lowering Lateral No. 1.
EFFECT OF PASSAGE The contination of the above mentioned project.
· · · · · · · · · · · · · · · · · · ·
EFFECT OF NON-PASSAGE The above mentioned project cannot be started.
the control of the co
MONEY INVOLVED (DIRECT COSTS, EXPENDITURE, SAVINGS) Change Order #1 - \$4,695.00;
Change Order #2 - \$12,637.50; Change Order #3 \$32,135.74 to be paid for as follows:
ASSIGNED TO COMMITTEE